R&D Scoping and Framing Workshop
R&D Roadmap: Managing Western Water as Climate Changes
February 20 and 21, 2008

Responsibilities, Challenges, and Needs
Perspectives of Reclamation Water Operations Managers

Note: The information presented herein is intended solely to facilitate a working level dialogue between the federal scientific community, and Reclamation water and environmental resource managers, on climate change research needs in support of Western water management. As such, "*this information has not been formally disseminated by the Bureau of Reclamation and should not be construed to represent any agency determination or policy*".[(1)]

Generally describe your region's water operations and planning responsibilities *(this is meant to be a high level summary of your world):*

The Dam Safety Program is responsible to reduce life safety and economic consequences risks associated with the potential failure of Reclamation's Dams.

Describe the primary types of decisions that your region makes associated with water and operations and planning that might be affected by climate change.

Climate change, and any associated impacts on hydrologic runoff events, could affect the risk of failure or mis-operation at a Reclamation facility, and therefore, the decision to further investigate and/or take action to reduce these risks.

What are the primary scientific or non-scientific factors that typically govern these decisions?

The primary factors that govern the decision to further investigate and/or take action to reduce risk are the estimated annualized probability of failure and the annualized loss of life. The volume, duration, and peak flow associated with runoff from any, but in particular, extreme hydrologic, events may be impacted by climate change.

Who are the primary stakeholders affected by these decisions and summarize their primary concerns?

The primary Stakeholders affected by these decisions are:

- Public (Public Safety)
- Water Districts (impacts to resource management)
- Reclamation (facility owner/operator – public trust responsibility, financial/legal liability)
- Environmental Community (environmental loss/damage)

In general, list the top three wishes that you would like for scientific community to provide you, in support of your western water management responsibilities that are related to understanding and utilizing climate change information.

1. Demonstrate clear and predictable impact/no-impact of climate change on extreme hydrologic events. Develop rational and accurate (with limited uncertainty) tools to determine frequency flood impacts.

1/ Stated in accordance with Information Quality Act (Public Law 106-554), Final Information Quality Bulletin for Peer Review (Office of Management and Budget, December 16, 2004).

2. Given clear impacts on extreme hydrologic events, demonstrate clear and discernable impacts on risk of life safety and/or risks of failure.

3.

Are there current or emerging *"project-specific applications"* in your region where answers to these three wishes may be beneficial to you in the near-term?

An addendum screening tool to an existing Comprehensive Facility Review (CFR) hydrologic screening tool.

An addendum to an existing Estimating Hydrologic Risk Toolbox.

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